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BEFORE THE ARIZONA CORPORATION COMMISSION REUEIVED

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COMMISSIONERS

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IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY. AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR

10 VALUE OF ITS UTILITY PLANT AND

11 PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON 12

FOR UTILITY SERVICE BY ITS PARADISE VALLEY WATER DISTRICT

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IN THE MATTER OF THE APPLICATION

OF ARIZONA-AMERICAN WATER 15 COMPANY, INC., AN ARIZONA

CORPORATION. 16

FOR APPROVAL OF AN AGREEMENT WITH THE PARADISE VALLEY COUNTRY

17 **CLUB**

DOCKET NO. W-01303A-05-0910

DOCKET NO. W-01303A-05-0405

BRIEF OF COMMISSION STAFF

I. INTRODUCTION

The Arizona-American Water Company ("Arizona-American Water" or the "Company") is the largest, investor-owned water utility in the State of Arizona. It serves approximately 131,000 customers throughout the state. The Paradise Valley Water District (hereinafter referred to as "Arizona-American PV" or "Company") serves approximately 4,737 metered customers, 93% of which are residential customers living in the Town of Paradise Valley (the "Town" or "Paradise Valley"), Scottsdale and some unincorporated areas of Maricopa County.

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This is the Arizona-American PV's first rate case in approximately seven years. The parties have been able to resolve a lot of their differences throughout the course of this proceeding. However, as will be discussed, several rate base, revenue requirement and rate design issues remain.

Staff is recommending that the Commission adopt an Original Cost Rate Base ("OCRB") of \$14,412,903.00. The filed adjusted test-year rate base was \$11,651.216. Staff and the Company are now in agreement with Staff's final recommendation of \$14,412,903. The Residential Utility Consumer Office ("RUCO") takes issue with inclusion of fire flow investment in rate base. Other issues that remain in dispute between the parties and which are discussed herein include (1) the inclusion of backup pumping equipment in rate base, (2) refund of the after tax gain on the sale of property by the Company, and (3) whether the Arsenic Cost Recovery Mechanism ("ACRM") provides sufficient due process for including arsenic remediation projects in rate base for the Step One Surcharge.

The most significant issue in dispute in the case is whether the Commission should allow recovery of investments made by the Company relating to fire flow improvements. Several parties testified that the Town of Paradise Valley's fire flow Ordinance was precipitated by a fire and resulting health and safety concerns of the Town.

The Ordinance enacted by the Town of Paradise Valley brings its fire flow standards up to Uniform Fire Code standards, based upon recommendations of a Task Force comprised of Town Officials, Company representatives and Town residents. The Town would like the project completed in a five year time-frame, but has apprised the Commission it cannot legally fund the project itself. To-date the Company has invested slightly over \$4 Million in fire flow improvements. Arizona-American PV estimates the fire-flow improvements to cost up \$16 Million. RUCO argues that the Town should fund fire flow improvements itself and that it has the legal ability to do so. However, to-date RUCO has offered no support for its position regarding the legal ability of the Town to fund these improvements which would inure to the benefit of a private entity. The Town has filed a letter in the docket stating that it cannot legally fund the projects. In addition, to the extent the Commission authorizes the recovery of fire flow investment, a remaining issue in dispute is how these improvements should be recovered.

Staff is recommending that the Commission adopt an annual revenue requirement of \$5,333,359 and annual operating expenses of \$3,689,911. Staff's proposed revenue requirement is \$5,333,359 based on a Rate of Return ("ROR") of 7.24%. The Company, on the other hand is recommending an annual revenue requirement of \$5,511,451 based on a rate of return of 7.84%.

The most significant revenue requirement issue that remains in dispute is the Company's proposed rate of return on equity ("ROE"). The Company hired two outside experts to support its proposed ROE. However, the particular methodology that the experts are urging the Commission to adopt has been rejected by virtually every regulatory body that has considered it. The proposed methodology results in a ROE two percentage points higher than that produced under well recognized and accepted methodologies that are now used by most regulatory bodies in the United States. The Commission should reject the Company's proffered methodology which Staff believes is designed to give it an inflated return at the expense of ratepayers.

Finally, the parties also differ on the amount the Company should be authorized for rate case expense. Staff's Brief will also discuss this issue.

II. DISCUSSION

A. Rate Base Issues

1. Staff Recommends that the Commission Adopt an Original Cost Rate Base of \$14,412,903.

The Company proposed that its adjusted test-year rate base be used as its OCRB.¹ The filed adjusted test-year rate base was \$11,651,216. Staff recommended several adjustments to the Company's adjusted OCRB. Staff withdrew some of the adjustments after further explanation from the Company.² The Company accepted other adjustments,³ and agreed with Staff's final recommendation of \$14,412,903 for OCRB.⁴

Ex. A-19 at 5: 6-15.

Tr. at 480:11-16 (Staff withdrew its recommendation to eliminate \$90,286 in deferred maintenance. The Company provided evidence that it is industry practice to defer costs for tank painting. See Ex. S-2 at 5).

Ex. A-15 at 9:11-19 (Company accepted Staff's adjustment of \$107,315 for accumulated depreciation.); Tr. at 266:15-17 (Company accepted Staff's recommendation of zero cash working capital.).

See Ex. A-34 at 1 and Ex. S-15 at 2.

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Id. Ex. S-5 at 7. Ex. S-1 at 5:1-6.

Ex. A-7 at 7.

Ex. A-15 at 8:11-17.

See RUCO's Schedule TJC-2, adjustment numbers 5 and 6. See Ex. R-11 at 11:1-10; see also Tr. at 407:19-23.

RUCO had a final recommendation of \$10,809,498 for the adjusted test-year rate base. RUCO included five adjustments that were not accepted by the Company or Staff.⁵ Four rate base issues are discussed in greater detail below. With the exception of one adjustment, RUCO's adjustments are discussed in the four issues.6

2. Certain Fire Flow Projects Should Be Included in Rate Base at this Time and Other Projects and Costs Should be Deferred Using the Accounting Order.

Staff's largest adjustment was for plant placed in service for public fire safety ("fire flow" projects). The Company incurred \$3,018,867 for fire flow projects by the end of the test year. The costs were incurred for the Jackrabbit/Invergordon Water Main Replacement Project ("Jackrabbit/Invergordon Mains") and for the McDonald Drive Main Extension Project ("McDonald Mains").7

Company witness Joseph E. Gross testified that the Jackrabbit/Invergordon Mains were placed in service in March 2005. Mr. Gross also testified that the McDonald Drive Mains would be in service in 2005. The McDonald Drive Mains were in service when Staff Engineer John A. Chelus conducted a field inspection on October 6, 2005.9

Staff recommended that the \$3,018,867 for post-test year plant be included in rate base at this time. 10 The Company accepted Staff's recommendation but, 11 RUCO did not. 12 RUCO recommends that costs incurred for fire flow projects not be included in rate base now or in the future. RUCO takes the position that the projects should be funded by contributions in aid of construction by the Town of Paradise Valley.¹³ RUCO's position is addressed in the section on fire flow projects rather than this section on rate base.

See RUCO final Schedule TJC-2 (filed April 21, 2006).

RUCO adjustment number 4 is for negative \$61,432 for cash working capital. Although Staff recognized that most sophisticated companies have a negative cash working capital, Staff recommended a zero cash working capital. See Ex. S-1 at 6:9-21.

Staff's recommendation was based upon its determination that the projects were revenue neutral and did not materially reduce operating expenses.¹⁴ Staff also wanted to encourage improvement in public fire safety, and to minimize deferral of costs pursuant to the Accounting Order adopted by the Commission in Decision No. 68303.¹⁵

In its rebuttal testimony, the Company proposed to include an additional project in rate base and additional costs related to the Jackrabbit/Invergordon Mains and McDonald Drive Mains. ¹⁶ The additional project is the Nauni Valley Drive Project and was placed in service on January 3, 2006. ¹⁷ Company witness Joel Reiker testified that the additional costs were for work orders that closed "in the weeks after those projects were placed in service on October 6, 2005." ¹⁸

In his surrebuttal testimony, Staff witness James Dorf recommended excluding the additional project and costs in rate base at this time.¹⁹ Mr. Dorf cited Commission Decision No. 61831 in support of its recommendation. Decision No. 61831 states that:

In order to allow Staff and intervenors an adequate time to review and audit any such adjustments, the Company shall limit its adjustments to add post-TY plant to include only plant that is used and useful and in service within 90 days of the date that the rate application is deemed sufficient.²⁰

Mr. Dorf testified that Staff filed a sufficiency letter on July 18, 2005. He also testified that the additional project and costs did not satisfy the 90-day requirement in Decision No. 61831.²¹

During the hearing, Company witness Joel Reiker offered a new position accepting deferral for the additional project and costs pursuant to the existing Accounting Order.²² Mr. Dorf also testified that the existing Accounting Order could be used for deferral of the additional project and costs.²³

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²³ Ex. S-1 at 5:1-6..

^{24 15} *Id.*

¹⁶ Ex. A-15 at 1:19-2:4; see also Ex. A-16 at 2-4.

^{25 | 17} Ex. A-8 at 1:20-25.

¹⁸ Ex. A-16 at 2:6-15.

²⁶ Ex. S-2 at 4:10-24; see also Tr. at 480.

Decision No. 61831 at 4.

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²² Tr. at 274:4-22; see also Tr. at 480:3-6.

Tr. at 488:9-14.

- a. The Commission should allow for recovery of investments related to fire flow which are prudently incurred and used and useful.
 - 1. The Company's investment in PSF is being made to comply with a Town of Paradise Valley Ordinance and is supported by the Town.

Section 13-1-13 of the Town Code establishes the minimum fire flow from all hydrants in the Town at 1,500 gallons per minute or 5,678.1 liters per minute.²⁴ This is also consistent with the fire flow requirements of the Town of Scottsdale.²⁵ In a letter to Chairman Hatch-Miller dated February 15, 2006,²⁶ Town Manager Thomas Martinsen stated the following:

From the town's perspective each of the three water utilities serving our residents must utilize whatever mechanisms they have to find [sic] improvements which are necessary for public safety. The Town, like other Arizona municipalities, has adopted the Uniform Fire Code which specifies minimum flow rates necessary for different types of development. A minimum fire flow of 1500 gallons per minute is the standard which all three water utilities must meet within the Town.

The project, while costly, has the support of the Town and this initiative was begun at the grass roots level according to Town Manager Thomas M. Martinsen:

Actually, the water system improvement plan designed to provide adequate fire flows began at the grass roots level by Town residents who were aware throughout the process that the cost of the improvements would need to be supported by rates.²⁷

The Town formed a Task Force comprised of City officials, City residents, and Company representatives. The Task Force investigated the need for improving fire flows in Paradise Valley, and held public meetings on how to implement a plan of improvement.²⁸ The Town determined that the improvements should be completed in a five year time-frame.²⁹ A fire in Paradise Valley was one of the precipitating events that led to the Town's adoption of the new fire flow standard or ordinance.³⁰

^{25 &}lt;sup>24</sup> Ex. S-11.

²⁵ Tr. at 185:11-14.

²⁶ Ex. A-29.

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^{27 | 28} Tr. at 118:12-17.

²⁹ Ex. A-29 at 1.

Tr. at 176:8-9, 448:14-20; Ex. A-4 at 3:6-10.

Much of the infrastructure in Paradise Valley was constructed 40-50 years ago according to Company representatives.³¹ Sizing the system to meet this new fire flow standard could, therefore, ultimately cost up to \$16 Million.³² According to both the Company's testimony³³ and the City's letter to the Commission, the citizens of Paradise Valley³⁴ support this undertaking. The citizens are also willing to pay higher rates to Arizona-American Water to put the necessary infrastructure in place.

Notwithstanding the support underlying the Task Force and Town Council's position, several Scottsdale residents offered public comment in opposition to the fire flow project, arguing that it would not benefit them. However, Company witness Townsley testified that improvements in fire-flow will assist all customers who are part of an interconnected grid.³⁵ The Scottsdale and Paradise Valley systems are not separate systems but are all interlinked together as an interconnected grid.³⁶ So a benefit in one location is a benefit to all locations.³⁷ Several Scottsdale residents appeared to be confusing fire flow with water pressure, and then opposing the improvements because they had adequate "water pressure." Company Witness Townsley testified that fire flow can be insufficient even if water pressure is sufficient.³⁸

The need for this investment was, however, best expressed in the Commission's Fire Flow Accounting Order:³⁹

The Town of Paradise Valley ("Town") has requested the fireflow improvements since they are needed to reduce the risk to life and property. Mr. Thomas M. Martinsen, the town manager of the Town has requested expedited review. Town residents' safety and the protection of their property are highly dependent on this program.

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¹ Tr. at 66:1, 118:18-20.

³² Ex. A-19 at 24:1-2.

Tr. at 310:22-314:10.

See also Tr. at 100:5-6 ("[W]e took on the fire-flow project in Paradise Valley because the community came to us and strongly wanted that kind of project to be developed.").

 $^{25 \}parallel^{35}$ Tr. at 115:22-25.

 $[\]int_{0}^{36} Id$.

 $^{26 \}parallel^{37} Id.$

Tr. at 115:14, 135:13-136:18.

In the Matter of the Application of Arizona-American Water Company, Inc.'s Request for an Accounting Order Authorizing the Deferral of Costs Associated with Public Safety/Fire Flow Improvements in its Paradise Valley Water District, Docket No. W-01303A-05-0704, Decision 68303 (November 14, 2005).

Decision 68303 at 1.

Ex. A-29 at 1-2.

2. The Town asserts that it cannot legally fund the fire flow investments; and thus citizens of Paradise Valley may be left without adequate fire flow protection without the Commission's allowance and recognition of these costs.

The Town Manager Martinsen's letter contains the Town's legal opinion that it cannot fund the fire flow improvements.

The Town government cannot, for both statutory and public policy reasons, fund water system improvements for a private utility. The Town is not a water utility. Town residents are served by three water utilities, Arizona-American, Berneil Water Company and the City of Phoenix. Each of these utilities is responsible to make the necessary improvements within their respective service area, and to not only meet public health standards, but to meet fire safety standards prescribed by the Uniform Fire Code as well.

Fortunately, all three water utilities are moving forward with necessary improvements. Legally, the Town is not a water utility and could not spend public money on water system improvements without the vote of the people. From a public policy perspective the Town could not subsidize a private business with public money. Both A.R.S. Section 9-514 and the Gift Clause in the Arizona Constitution prohibit the Town from spending general fund money to build or contribute to the construction of the water system infrastructure that would be owned by Arizona American. 40

The Gift Clause, Article 9, Section 7 of the Arizona Constitution provides as follows:

Neither the state, nor any county, city, town, municipality, or other subdivision of the state shall ever give or loan its credit in the aid of, or make any donation or grant, by subsidy or otherwise, to any individual, association, or corporation, or become a subscriber to, or a shareholder in, any company or corporation, or become a joint owner with any person, company, or corporation, except as to such ownerships as may accrue to the state by operation or provision of law or as authorized by law solely for investment of the monies in the various funds of the state.

There is a large and complex body of case law interpreting the Gift Clause of the Arizona Constitution. Staff is confident that this case law was considered by the Town Attorney in reaching his conclusion that the Town cannot legally fund the investment. Further, there is nothing in the record that would indicate that the Town could legally fund the investment. If the Town is legally prohibited from funding the improvements, allowing recovery of this investment may be the only

option available to bring the water system up to Uniform Fire Code standards.

Staff acknowledges that the Company's fire flow improvement plan requires a major investment and overhaul of the Company's water system. Staff recommends including prudently incurred costs for fire flow plant that is used and useful because the investment is necessary to comply with a Town ordinance. Moreover, fire flow plant is in the public interest because it will help protect life and property.

3. Staff is not aware that the Commission has disallowed the inclusion of fire flow investment that is used and useful in any prior decisions.

Staff is aware of no previous Commission decision which has denied a water company's request for recovery of its investment in fire flow improvements. Indeed, recent Commission decisions recognize that this is an important public safety issue which must be addressed.

In Arizona-American's most recent rate case before the Commission,⁴¹ the Commission ordered the Company to form a fire-flow task force. The task force was to include representatives of the Company's Arizona management team, representatives from Youngtown and Sun City, a representative from the Sun City's Taxpayers' Association, a representative of the Recreation Centers of Sun City, and representatives from the fire departments serving Youngtown and Sun City. The purpose of the task force was to determine whether water production capacity, storage capacity, water liens, water pressure, and fire hydrants in these communities are sufficient to provide the fire protection capacity desired by each community. Decision 67093 at 31.

3. Backup Pumping Equipment Should Be Included in Rate Base at This Time.

In his direct testimony, Staff witness James Dorf recommended excluding certain pumping equipment from rate base at this time.⁴² The pumping equipment was plant held for future use as backup in case existing pumps went down. Mr. Dorf recommended exclusion because the Company had not provided any evidence that the equipment was used in over ten years, and had not provided a

Re Arizona-American Water Company, Inc. Docket Nos. WS-01303A-02-0867 et al., Decision 67093 (June 30, 2004).

⁴² Ex. S-1 at 4:3-6.

definitive plan for its use.⁴³

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RUCO also recommended excluding the pumping equipment from rate. RUCO witness Timothy J. Coley testified that RUCO's recommendation was based on RUCO's determination that the pumping equipment was not used and useful.⁴⁴

In his rebuttal testimony, Company witness Joel Reiker testified that the pumping equipment was used as back up for Well No. 16 during the test year. 45 Mr. Reiker also testified that the pumping equipment held for future use "reduce[s] the possibility of a significant interruption in the summer."46

Staff witness Steve Olea testified that the pumping equipment is used and useful because it served as backup during the test year. 47 Mr. Olea explained that holding the equipment as backup is useful because of the size of the wells and the pumps. 48 He also testified that retaining backups on site is useful to ratepayers because of the time it would take to get replacements. Mr. Olea stated that if a well went down, the Company could get it up and running again very quickly with backup equipment already on site. 49

Staff witness James Dorf changed his original recommendation. He now recommends including the equipment in rate base because of Mr. Olea's determination that the equipment is used and useful.⁵⁰ However, Mr. Dorf further recommends that the equipment be transferred from the account for plant held for future use to the appropriate plant account.⁵¹

RUCO witness Timothy Cooley testified that when he wrote his testimony the Company stated that the equipment was not being used.⁵² Mr. Cooley did not address Mr. Reiker's rebuttal testimony. Mr. Cooley also did not offer a position on how often backup equipment must be used to

 $^{22 \}begin{vmatrix} \frac{1}{43} & Id. \end{vmatrix}$

Tr. at 367:2-16. Note that Staff's original adjustment was for \$138,682 (see Ex. S-1 at 4), but RUCO's adjustment was for \$130,857 (see Schedule TJC-2, cf. R-8 at 4:20-21, putting the adjustment at \$138,682).

⁴⁵ Ex. A-15 at 7:10-12.

 $^{25 \, | \, ^{46}}$ Id. at 7:21-23.

⁴⁷ Tr. at 382:10-22.

 $^{26 \}parallel^{48}$ Id. at 381:12-24.

⁴⁹ *Id*.

^{27 50} Tr. at 479:16-21.

¹ Id. at 479: 21-24.

^{28 | 52} Tr. at 370:3-117.

be considered used and useful.⁵³ Finally, Mr. Cooley did not offer a RUCO position on whether backup equipment could be considered used and useful if it could prevent service disruptions to residential customers.⁵⁴

4. The Ratepayers' Share of the After Tax Gain on the Sale of Land Should Be Refunded Through a Surcredit and Amortized Over a Three-Year Period.

In its Application, the Company proposed to share 50% of the after tax gain on the sale of land with ratepayers.⁵⁵ The Company proposed to refund the 50% share with a surcredit amortized over a five-year period.⁵⁶ Staff witness James Dorf accepted the surcredit mechanism and proposed a three-year amortization period,⁵⁷ which the Company accepted.⁵⁸

RUCO agreed with the 50% share, but recommended the sharing on a pre tax basis rather than after tax. RUCO also recommended that the Company create a deferred liability account for the pre tax amount rather than use a surcredit mechanism. RUCO explained that the amount in the account could then be amortized over a five-year period. The deferred liability account would also reduce rate base.⁵⁹

RUCO argued that sharing on an after tax basis does not compensate ratepayers for the time value of money. It also argued that use of a surcredit mechanism is inappropriate because the Company is not entitled to earn a return on the gain.⁶⁰

Staff witness James Dorf testified that Staff's position attempted to minimize any effect for the time value of money. For example, Staff recommended a three-year amortization period rather than the Company's proposed five-year period. Mr. Dorf further explained that Staff's recommendation is a simpler and more appropriate method of refunding ratepayers' share of the gain.⁶¹

^{24 53} Id.

⁵⁴ *Id.* at 369:25-370:12.

²⁵ Ex. A-19 at 36-37.

⁵⁶ Id

^{26 57} Ex. S-1 at 8:1-9.

⁵⁸ Ex. A-16 at 5:7-14.

^{27 | 59} Ex. R-7 at 8:6-14.

⁶⁰ Id.

⁶¹ Tr. at 481:10-481:1; 483:7-15.

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Tr. at 484:17-24; 486:5-11. Ex. A-19 at 14:9-18.

Ex. S-6 at 22:9. 24

Id. at 22.

25 Id.

Id.26

Ex. R-5 at 33:9-34:14.

27 Id. at 33:9-23.

71 28

72 Ex. R-6 at 31:23-28.

Moreover, the surcredit mechanism appropriately recognizes the net tax effect of the gain on the revenue requirement. Mr. Dorf testified that "[a]s you reduce the revenue, you would amortize the surcredit and there would be no tax impact at that point. They would match."62

5. The Arsenic Cost Recovery Mechanism Provides Sufficient Due Process for Including Arsenic Remediation Projects in Rate Base for the Step One Surcharge

In its Application, the Company requested approval of an ACRM.⁶³ Staff recommended authorization of the ACRM.⁶⁴ The ACRM would provide for a surcharge mechanism to recover capital expenditures for remediation projects. The Company's proposal is similar to the ACRM approved for Arizona Water Company in Decision No. 66400.65 In addition, the Company's proposal is not materially different from the ACRM approved for its other districts in Decision No. 68310.66 Staff Witness Igwe's recommendations with respect to the ACRM are addressed at page 22 of his testimony.⁶⁷ The ACRM would include an application for a Step One Surcharge no later than July 1, 2006.68

RUCO witness Rodney L. Moore expressed concern with the proposed ACRM. Mr. Moore testified that the review timeline for the Step One Surcharge is insufficient for a thorough audit and analysis of the proposed filing.⁶⁹ Mr. Moore also questioned whether the remediation project was oversized and had uses other than arsenic treatment. To For example, Mr. Moore questioned whether additional storage was necessary for arsenic treatment. Finally, Mr. Moore testified that RUCO's understanding of the review process is that it will require more "than a mere Open Meeting."⁷²

Staff witness Steve Olea testified about Staff's view of the audit and review process for the proposed filing of the Step One Surcharge. Mr. Olea testified that the Company would first submit required documentation. Next, Staff Engineering would inspect the plant covered by the ACRM, and Staff accountants would audit the costs. Staff would then draft a Staff report and recommended order that would go to an Open Meeting. Although the process would be quick, Mr. Olea stated that Staff would conduct a very thorough and complete investigation and analysis.⁷³

Mr. Olea also testified that due process would be provided to all interested parties. He explained that all parties would have an opportunity to provide comment at the Open Meeting. Finally, Mr. Olea testified:

[T]he way Staff sees [the due process] is [that] the Commission would have four choices, which are the same four choices they have with any recommended order that comes before them. And that would be they could approve as is, they could amend it and approve it, they could deny it, or send it back to a hearing.⁷⁴

Thus, the proposed ARCM process provides sufficient due process.

B. Revenue Requirement Issues

1. Staff Recommends that the Commission Adopt an Annual Revenue Requirement of \$5,333,359 and Annual Operating Expenses of \$3,689,911.

As stated in the section on rate base, the Company and Staff are in agreement on an adjusted rate base of \$14,412,903. The Company proposes an annual revenue requirement of \$5,511,451 based on a ROR of 7.84%.⁷⁵ The Company also proposes operating expenses in the amount of \$3,725,260.⁷⁶ The Company calculated its current ROR at 6.00%. The Company's proposed revenue requirement and operating expenses would result in an 8.51% increase in revenue over test year revenues.⁷⁷

Staff proposes a revenue requirement of \$5,333,359 based on a ROR of 7.24%.⁷⁸ Staff proposes operating expenses in the amount of \$3,689,911.⁷⁹ Staff calculates the Company's current ROR at 6.15%. Staff's proposed revenue requirement and operating expenses would result in a

^{25 73} Tr. at 378:11-25.

⁷⁴ *Id.* at 379:2-8.

²⁶ See Ex. A-34, Company Post-Hearing Schedule 1.

See id., Company Post-Hearing Schedule 4.

⁷⁷ See id., Company Post-Hearing Schedule 1.

⁷⁸ See Ex. S-15 at 1.

⁷⁹ See id. at 3.

5.00% increase in revenue over test year revenues.⁸⁰ The only remaining dispute between Staff and the Company is for rate case expense.⁸¹ Staff also disagrees with RUCO's proposal to exclude rate case expense related to fire flow projects.

2. Return on Equity

a. The Staff's return on equity determination is consistent with prior determinations of the Commission and with long-standing regulatory precedent

Staff is recommending a capital structure for Arizona-American PV of 63.3% debt and 36.7% equity. The Company and RUCO agree with this capital structure. Staff is, however, recommending that Arizona-American PV be required to attain and maintain a capital structure with an equity/debt ratio of 40/60. The average capital structure for Staff's sample water utilities is comprised of approximately 50.9 percent debt and 49.1 percent equity.

The parties cannot agree on the appropriate return on equity for the Company. Staff and RUCO both used long-standing methodologies approved and utilized by the Commission and are recommending ROEs of 10.4% and 10% respectively. The Company, on the other hand, is using a novel methodology not widely utilized to attain a 12.0% ROE.

Staff's ROE determination is consistent with prior determinations of the Commission and with long-standing regulatory precedent.⁸⁷ Staff's ROE determination uses methodologies that have been utilized by regulatory agencies for years and are widely accepted.

^{20 80} See id. at 1.

But see id. at footnote A.2 (The Company's post-hearing schedules erroneously included an addition of \$2,153 for miscellaneous allocated corporate expense, rather than a deduction. The net effect is a difference of \$4,306.).

Ex. S-3 at i.

^{23 | 83} Tr. at 249:20-250:8.

⁸⁴ Ex. S-3 at i.

⁸⁵ *Id.* at 6:23-24.

Tr. at 68, 205:22-24, 249:20-250:8.

See In the Matter of the Application of Chaparral City Water Company, Docket W-02113A-04-0616, Decision 68176 (Sept. 30, 2005); In the Matter of the Application of Rio Rico Utilities Inc., Docket No. WS-02676A-03-0434, Decision 67279 (Oct. 5, 2004); In the Matter of the Application of Valley Utilities Water Company, Inc., Docket No. W-01412A-04-0736, Decision 68309 (Nov. 14, 2005); In the Matter of the Application of Bella Vista Water Co., Inc., Docket No. W-02465A-01-0776, Decision 65350 (Nov. 1, 2002).

By contrast, the Company's proposed methodology would be a break with that long-standing precedent. Indeed, the Company's cost-of-capital consultants have been mostly unsuccessful in gaining regulatory approval of the methodology in the United States and Canada. The methodology has been rejected or not adopted by every state commission with the exception of one and by the Federal Energy Regulatory Commission. And most regulatory bodies outside of the United States.⁸⁸ The only state commission that the Company states has adopted its particular methodology has been the Missouri Public Service Commission..

The Staff's ROE is based on cost of equity estimates for Paradise Valley that range from 10.2% to 10.6% (inclusive of a 0.6 percent financial risk adjustment). 89 The Staff used two marketbased models to estimate the cost of equity: the discounted cash flow ("DCF") model and the Capital Asset Pricing Model ("CAPM"). 90 Staff chose these models because they are widely recognized and accepted as appropriate models to estimate cost of equity and the Commission has consistently relied upon their results. 91 Staff used two versions of the DCF model: the constant-growth DCF Model and the multi-stage or non-constant growth DCF. 92 Staff's constant growth DCF estimate was 9.7% and its multi-stage DCF estimate was 9.4% producing an overall DCF estimate of 9.6%. 93

Staff then used the same sample companies to compute the CAPM to estimate Arizona-American PV's cost of equity. 94 Staff's overall CAPM estimate was 10.0%. 95 Staff's average estimate of the cost of equity under both methodologies for the sample water utilities was 9.8%. 96 Staff then quantified the effect of Arizona-American PV's capital structure on the cost of equity. 97 Because Arizona-American PV's capital structure is more highly leveraged than the sample water utilities capital structure, its stockholders bear additional financial risk. As a result, its cost of equity

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Tr. at 201-02.

Ex. S-3 at 2-3. 24

Id. at 13:14-21.

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Id. at 14:20-23.

²⁶ Id. at 24-26.

Id. at 27:17-18.

²⁷ Id. at 31:14.

Id. at 34.

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Id.

is higher than that of the water companies in Staff's sample.⁹⁸ Staff used the methodology developed by Professor Robert Hamada to estimate the effect of Arizona-American PV's capital structure on its cost of equity.⁹⁹ Staff calculated a financial risk adjustment of 60 basis points.¹⁰⁰ Staff's adjusted ROE is 10.4%¹⁰¹

b. The return on equity recommendation of the Staff is at the highend of the returns on equity authorized by state commissions for all of the Applicants' subsidiaries.

The ROE that Staff is recommending exceeds the average and median authorized RORs for all of Arizona-American's operating subsidiaries. The average ROR of all of its subsidiaries at this time is 10.12%. The median ROR on equity is currently at 10.09%. In this proceeding, the Company complains that the most recent ROEs on equity authorized by the Commission for other Arizona-American operating districts are at the lower end of the range that has been authorized for its subsidiaries throughout the United States. However, the Staff's ROE recommendation would put the Arizona-American PV water district in the upper range of authorized ROEs for its other subsidiaries nationwide. This result is demonstrated in the following chart taken from Ex. S-12 at 2:

15 16	<u>State</u>	Effective Date of Order	Requested ROE	Granted ROE
10	Arizona-American	06/30/04	11.50%	9.00%
17	Indiana Water Co.	11/18/04	11.00%	9.25%
	Etown Water Co.	02/18/04	11.25%	9.75%
18	New Jersey Water Co.	02/18/04	11.25%	9.75%
19	Calif. Sacramento	04/16/04	11.00%	9.79%
	West Virginia Water	01/07/05	10.60%	9.85%
20	Ohio Water Co.	02/25/05	11.00%	9.88%
	Kentucky Water Co.	12/01/04	11.20%	10.00%
21	Missouri Water Co.	04/16/04	11.00%	10.00%
22	Calif. LA Division	09/23/04	10.70%	10.04%
	New Mexico Water Co.	12/12/03	11.15%	10.08%
23	Calif. Coronado Village	01/01/05	10.50%	10.10%
	New York (Long Island)	03/30/05	11.00%	10.10%
24	Virginia Water Co.	09/17/04	11.00%	10.10%
	Calif. Monterey	02/23/03	10.68%	10.26%
25	Illinois Water Co.	08/12/03	11.02%	10.27%

⁹⁸ Id.

^{27 99} *Id.*

¹⁰⁰ Id

¹⁰¹ Ex. S-3 at 35:10-11.

Iowa Water Co.	02/21/02	11.33%	10.45%
Maryland Water Co.	07/27/00	10.52%	10.52%
Hawaii Water Co.	04/19/04	10.90%	10.60%
Pennsylvania Water Co.	01/16/04	12.00%	10.60%
Tennessee Water Co.	03/09/05	10.70%	10.70%
St. Louis County Water Co.	04/18/01	12.00%	10.75%
PV	08/01/99	11.00%	11.00%

It is obvious from this chart that the Company's current 11.00% ROE set back in 1999, is higher than any of its other operating subsidiaries. The next highest ROR is 10.75% for St. Louis Water Co. set back in 2001. None of Arizona-American's operating subsidiaries have an authorized ROE of 12% as the Company is recommending in this proceeding.

c. The Applicant's proposed return on equity calculation suffers from several significant flaws which would lead to an inflated ROE in this case.

As Staff Witness Rogers points out in his testimony, there are several serious flaws with the Applicant's novel approach. First, the empirical capital asset pricing model is erroneously based on a market value capital structure instead of a book value capital structure. Staff Witness Rogers pointed out the problem with Dr. Kolbe's approach in the following passage from his direct testimony:

Use of a market value capital structure to estimate the cost of equity is predicated on the underlying erroneous logic that the Commission is obligated to maintain stock prices and perpetuate an ongoing rising spiral between revenues and stock prices. As previously discussed, expected returns in excess of the cost of equity cause market values to exceed book values. Increasing revenues, in turn, increases market values resulting a perpetual upward cycle. ¹⁰³

Second, Staff witness Rogers pointed out that several studies show that using a combination of growth projections is superior to the sole reliance on analysts' forecasts. Staff's ROE determination is the product of a more balanced approach that included both analysts' forecasts and historic growth. The Commission has not favored the use of analysts' forecasts alone, finding that

¹⁰² Ex. S-3 at i.

 $^{27 \}mid 103 \mid Id. \text{ at } 37:3-8.$

¹⁰⁴ *Id*. at 39:3-6.

^{28 105} Id

they were overstated. 106

Staff witness Rogers presented a dramatic illustration of the difference between using only projected earnings per share as Dr. Vilbert does as opposed to using historical numbers as well:

That is, the growth estimates for historical dividends, projected dividends and historical earnings per share are 2.6 percent, 4.7 percent and 3.5 percent, respectively, a fairly close knit group. On the contrary, Staff's growth estimate based on the projected earnings per share method preferred by Dr. Vilbert is 14.1 percent, a wide variance from the other three estimates. ¹⁰⁷

Third, Staff witness Rogers also pointed out that under the Market-Value Capital Structure methodology advocated by Dr. Kolbe, the cost of equity is dependent upon the cost of debt. Another problem noted by Staff witness Rogers is that the cost of debt used by the Company's experts are historical and does not reflect current costs.

3. Staff Recommends Rate Case Expense in the Amount of \$208,700, including a 50/50 Sharing of Expense for the Company's Cost-of-Capital Consultants.

The Company proposed a total of \$282,841 in rate case expense in its direct testimony. ¹⁰⁸ Company witness Stacey A. Fulter originally proposed to only include 50% of rate case expense for the Company's cost-of-capital consultants. ¹⁰⁹ Ms. Fulter testified that cost-of-capital expenses were reduced by 50% because the Company's investors and ratepayers equally benefit by the cost-of-capital testimony. ¹¹⁰ The Company estimated the expenses at \$158,767, and included only \$79,383 in rate case expense. ¹¹¹

Prior to filing its direct testimony, Staff received a revised estimate of rate case expense in the amount of \$301,832. In his rebuttal testimony, Company witness Thomas M. Broderick also reversed the Company's position on sharing cost-of-capital expenses. The Company now seeks full

In the Matter of the Application of Arizona Water Company, an Arizona Corporation, for Adjustments to Its Rates and Charges for Utility Service Furnished by Its Eastern Group and for Certain Related Approvals, Docket No. W-01445A-02-0619, March 19, 2004, Decision No. 66849 at 22 (March 19, 2004).
 Ex. S-3 at 39:15-19.

²⁶ Ex. A-22 at 3.

¹⁰⁹ *Id*.

^{27 | 110} Id.

¹¹¹ Id

¹¹² *Id.* at 10.

recovery for its cost-of-capital consultants. 113

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Staff recommended a decrease of \$74,141 from the Company's original proposal of \$282,741. 114 Staff's recommended rate case expense is presented in Schedule AII-9 of Exhibit S-6. Staff also reviewed the Company's revised estimate of rate case expense. Staff continues to support its determination that the proper level of rate case expense is \$208,700. 115 Additionally, Staff believes that the Company's revised estimate of time required for its cost-of-service witness was excessive. 116

Staff's recommended level of rate case expense still recognizes a 50/50 sharing between investors and ratepayers for cost-of-capital expenses. Staff witness Alexander Ibhade Igwe testified that the original amount of \$158,767 for cost-of-capital consultants is excessive. Company witness Thomas Broderick justified the Company's changed position for full recovery by testifying that:

The Company must presently rely upon the best available expertise in light of the low 9% return on equity granted in our most recent Arizona rate cases, which placed Arizona American Water last among all the state affiliates of American Water. 118

Staff believes that the Company's justification is misplaced. Mr. Igwe testified that:

While Staff recognizes the Company's right to engage the services of the best consultants, it appears reasonable to share the related costs when the Company's cost of capital witness, the Brattle Group, primarily argues for a higher than normal cost of equity. 119

At hearing, Staff also presented an exhibit comparing the ROE of the Company's affiliates. The average ROE authorized for the Company's affiliates is 10.12%, and the median ROE is 10.09%. Staff's recommended ROE in this proceeding is 10.4%. Finally, Staff witness Darron W. Carlson testified that "[s]taff strongly believes that the benefits of the cost of capital portion of rate case expenses flow to both investors and ratepayers."

¹¹³ Ex. A-17 at 2.

²⁴ Ex. S-6 at 11:18-20.

¹¹⁵ Ex. S-8 at 7:10-12.

^{25 | 116} Ex. S-6 at 10:15-11:14.

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^{26 | 118} Ex. A-17 at 2:18-21.

¹¹⁹ Ex. S-6 at 10:20-23.

^{27 | 120} Ex. S-12.

¹²¹ Ex. S-15 at 1.

¹²² Ex. S-8 at 7:19-20.

a. The Commission Should Reject RUCO's Argument that Rate Case Expense Should Not Include Costs for Requesting Recovery of Fire Flow Improvements.

RUCO witness Rodney L. Moore justified RUCO's proposed level of rate case expense in part on a legal argument related to fire flow improvements. Mr. Moore testified that rate case expense should not include costs for requesting recovery of fire flow improvements. Mr. Moore cited Commission Decision No. 67093 in support of its position.

In Decision No. 67093, RUCO argued "ratepayers should not be charged for the Company's choice to incur the expense necessary to present the unorthodox argument, and that the amount of allowable rate case expense should therefore be reduced." Mr. Moore testified that the request for recovery of fire flow improvements is an "unorthodox argument about [a] discretionary item." He also claimed that RUCO's position is consistent with the holding in Decision No. 67093. 126

Staff does not believe that a request for recovery of fire flow improvements is an "unorthodox argument." Water utilities throughout Arizona include items in rate base that improve fire flows, e.g. fire hydrants and sizing of pipe to support flows to fire hydrants. Staff witness Steve Olea specifically testified "fire flow is not unusual for a water company to include in its service or rates or rate base." He also testified "every water company that has a fire hydrant has fire flow included in rates." 128

Furthermore, RUCO's reliance on Decision No. 67093 is misplaced. The legal argument at issue in that decision was a request to deviate from the "Commission's long-standing formula for determining revenue requirement." A request for recovery of fire flow improvements is not comparable to a request to deviate from a long-standing ratemaking methodology.

^{25 | 123} Ex. R-6 at 5:15-16.

¹²⁴ Decision No. 67093 at 19.

 $^{26 \}parallel^{125}$ Ex. R-6 at 5:19.

 $^{^{126}}$ *Id.* at lines 20-22.

²⁷ Tr. at 535:13-15.

Id. at 537:10-11.

¹²⁹ Decision No. 67093 at 19.

4. Rate Design Issues

a. Rate Design Overall

Staff generally concurs with the Company's rate design.¹³⁰ The Company has a conservation-type rate design with no gallons included in its base rates and three-tier inverted block commodity rates. Staff proposes no changes to rate design with the exception of the Mummy Mountain acquisition, where Staff is proposing to align them with the rates charged for other ratepayers.¹³¹

b. Staff offered two alternate recommendations for including fire flow investment in rates; both of which have a minimal impact upon the average or median residential customer bill.

The Company originally proposed the use of separate surcharges to recoup its investment in fire flow improvements. Staff's position, offered by witness Carlson, opposed the use of a separate surcharge by the Company to recoup this investment.¹³²

Staff's position is that a separate surcharge is unnecessary because the Commission already approved an Accounting Order for the Company which allows the Company to accrue a post-inservice allowance for funds used during construction on PFS plant investments until the related plant is placed in rate base and rates are established on that rate base. Through this post-in-service AFUDC, the Company will be compensated for the time value of its money until the plant is placed in rate base and reflected in rates. 134

In addition, Staff recommended use of the Company's proposed high-block usage surcharge to fund PFS plant investments. Staff, however, simplified the Company's surcharge in the following manner: a residential surcharge rate of \$2.15 per 1,000 gallons for all usage in the third tier and a commercial surcharge rate of \$2.15 per 1,000 gallons for all usage in the second tier. Staff estimates that this surcharge could produce approximately \$1.7 million per year. The funds collected through the surcharge would be classified as CIAC, directly offsetting the PFS investments

¹³⁰ Ex. S-7 at i.

¹³¹ *Id.* at 2:14-15.

¹³² Ex. S-6 at 20:3-4.

¹³³ Ex. S-7 at 3:15-19.

^{27 | 134} *Id*.

 $^{^{135}}$ *Id.* at 4.

¹³⁶ *Id*.

of the Company thereby minimizing the post-in-service AFUDC accruals. 137

Given the Company's position in its reply testimony that Staff's proposal could result in a delay in funding the fire flow project and given the Town's desire to have the improvements completed in five years, Staff later offered an alternative proposal for a separate surcharge, in the event the Commission ultimately believes that a surcharge is appropriate. Staff's alternative proposal would allow the Company to increase the high block additive surcharge from \$2.15 to \$3.15 per 1,000 gallons effective October 1, 2007. In addition, a new "Public Safety" additive surcharge of \$1.00 per 1,000 gallons to the second tier residential rate and a new "Public Safety" additive surcharge of \$1.00 per 1,000 gallons to the first tier of commercial rate would also begin on October 1, 2007. Staff estimates that implementation of the October 1, 2007 increases would generate an additional \$1.8 million annually for a total of \$3.5 million annually. These surcharges would have no impact upon the average (22,193) residential bill or the median (11,500) residential bill because the surcharge for the second tier residential starts at 25,000 gallons.

Finally, whatever alternative the Commission adopts with respect to fire flow, Staff recommends modification of the authorized AFUDC methodology granted in Decision No. 68303.¹⁴² The surcharge collections should be a deduction for purposes of calculating the balance to which the AFUDC fire flow rate is applied.¹⁴³

RESPECTFULLY SUBMITTED this 5th day of May 2006.

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25 | 137 *Id.*

26 Ex. S-9.
Ex. S-9 at 1.

140 *Id*.

27 | 141 *Id.*

¹⁴² Ex. S-10.

¹⁴³ *Id*

1 2	Original and fifteen (15) copies of the foregoing were filed this 5 th day of May, 2006 with:			
3	Docket Control			
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